

California Energy Deal Marks Big Step for Geothermal Power

電気は毎日当たり前のように使っていますが、その電気がどこから来ているかを意識することはあまりないかもしれません。カリフォルニアでは、地面の下にある熱を生かす方法に注目が集まっています。発電の選択肢が変わることで、私たちの生活はどう変わのでしょうか。あなたは電気の作り方について考えたことがありますか。



1. Article

Read the following article aloud.

The method of making **electricity** from the Earth's natural heat has been moving forward quietly for many years. Recently, that effort has reached a milestone with a big, new project.

Southern California Edison announced it will buy electricity from Fervo Energy, a company based in Houston, Texas. Fervo uses geothermal energy to **produce** electric power. The company is going to **drill** up to 125 geothermal wells in the southwestern state of Utah. The goal is to produce 400 megawatts of electricity. That is being described as enough to supply power to 400,000 homes.

Wilson Ricks is an energy systems researcher at Princeton University in New Jersey. He said if the business deal helps geothermal technology, it could be "massively impactful for global decarbonization." The term decarbonization means using machines and methods that do not produce carbon-based substances when they are used.

New geothermal companies are using the drilling technology that oil and gas industries developed. They drill down into areas where underground rock is very hot to create steam, which can be used for power production. Engineers have been working on this technology for many years.

The United States is among the world's leaders in geothermal energy. But the U.S. Energy Information Administration (EIA) says it accounts for less than half of one percent of the nation's electricity.

Fervo is among the first companies to drill in what are called geothermal reservoirs. The EIA describes these as areas of very hot rock that are fairly close to the surface of the Earth — between one and three kilometers. In 2021, the company signed an agreement with Google to drill three wells in Nevada. The Associated Press (AP) reported that the project began supplying power to the Nevada electricity system, or grid, in November.

The new development in Utah is called the Cape Station project. It is about 320 kilometers south of Salt Lake City. It is expected to begin providing electricity as early as 2026.

California Energy Commission Chair David Hochschild said his state supports electricity that does not release carbon when it is produced. He said geothermal power works well with solar farms to provide steady electricity when the wind is not blowing, or clouds block the sun. He believes this is important to ensure reliable energy as California cuts the use of oil, gas and coal.

Sarah Jewett is vice president of Fervo. She called the deal “exciting.” Jewett said the deal “...isn't a **niche** energy **resource** going to a niche use.” The word “niche” describes something that has very limited availability and limited use in the real world.

Jennifer McDermott reported this story for the Associated Press. Mario Ritter, Jr. adapted this report for VOA Learning English.

2. Key phrases and vocabulary

First repeat after your tutor and then read aloud by yourself.

1. electricity (n.) power used to run machines and lights

The storm caused a power cut, and the whole town lost electricity for several hours.

2. produce (v.) to make or create something

The factory can produce thousands of items each day with new machines.

3. drill (v.) to make a deep hole in the ground using a machine

Workers will drill into the ground to test the soil before building the bridge.

4. niche (n.) a small and specialized area or use

She found a niche market for handmade bags online.

5. resource (n.) something useful that can be used or developed

Fresh water is an important resource for farming communities.

3. Questions

Read the questions aloud and answer them.

1. Where will the new geothermal wells be drilled?
2. How much electricity is the project expected to produce?
3. When is the Cape Station project expected to begin providing electricity?
4. Why do you think geothermal energy has developed more slowly than other energy sources?
5. Do you think governments should invest more in new energy technology? Why or why not?